

Mammalia, Chiroptera, Phyllostomidae, *Artibeus planirostris* (Spix, 1823) and *Trachops cirrhosus* (Spix, 1823): First record for the state of Sergipe, northeastern Brazil

José Anderson Feijó^{1*} and Hannah Larissa Nunes¹

¹ Universidade Federal da Paraíba, Centro de Ciências Exatas e da Natureza, Departamento de Sistemática e Ecologia, Laboratório de Mastozoologia. Campus I. CEP 58059-900. João Pessoa, PB, Brazil.

* Corresponding author. E-mail: andekson@gmail.com

ABSTRACT: Two specimens of bats deposited in the mammal collection of Universidade Federal da Paraíba have been found: one young female of *Artibeus planirostris* and one adult male of *Trachops cirrhosus*. These reports represent the first record of these species for the state of Sergipe, northeastern Brazil.

Artibeus planirostris (Spix, 1823) is widely distributed in South America, occurring from southeast Colombia to south Argentina (Hollis 2005). In Brazil, this species has been reported in all regions and is common in bat inventories (Bredt and Uieda 1996; Miretzki 2003; Sousa *et al.* 2004; Martins *et al.* 2006; Zórtea 2007; Moreira *et al.* 2008).

Trachops cirrhosus (Spix, 1823) is known from southern México to south Brazil (Nogueira *et al.* 2007). In Brazil, this species is not found only in the southern region (Bredt and Uieda 1996; Sousa *et al.* 2004; Martins *et al.* 2006; Moreira *et al.* 2008).

While studying bats deposited in the mammal collection of Universidade Federal da Paraíba (UFPB), João Pessoa, Paraíba, Brazil, we found one young female of *A. planirostris* (UFPB 3801) and one adult male of *T. cirrhosus* (UFPB 5076) that represent the first record of these species for the state of Sergipe, northeastern Brazil (Figure 1).

The specimen of *A. planirostris* was collected in August 1985, in municipality of Santo Amaro das Brotas (10°47'20" S, 37°03'16" W), and that of *T. cirrhosus* was obtained in June 2004, in the municipality of São Cristóvão (11°00'54" S, 37°12'21" W). Both specimens are preserved in 70 % alcohol, with skull removed.

The specimen of *A. planirostris* presents the diagnostic characters indicated by Hollis (2005), such as horseshoe of nose leaf free mediobasally, white faint facial stripes, dorsal fur short, and preorbital and postorbital processes poorly developed. External and cranial measurements of this specimen are shorter than those provided by Hollis (2005), probably because it is a young with unfused phalangeal epiphysis. These measurements (in millimeters) were taken according to Vizotto and Taddei (1973), and are as follows: forearm length 60.25; greatest length of skull 27.46; condylobasal length 24.57; postorbital constriction 6.6; zygomatic breadth 16.73; braincase breadth 13.59; and length of mandible 18.8.

Regarding the specimen of *T. cirrhosus*, both mensural and qualitative morphological characters conform well with data provided by Cramer *et al.* (2001). This specimen presents numerous cylindrical protuberances on lips and chin, rostrum shorter than braincase, p2 much smaller than p3, p2 displaced inward from tooth-row, total length 97 mm, ear length 32 mm, forearm length 63 mm, and length of mandible 17.42 mm.

The climate of Santo Amaro das Brotas and São Cristóvão is classified as megathermic humid and sub-humid, with average annual temperature of 25 °C, average annual rainfall of 1,399 mm, and the rainy season occurring from March to August. Both municipalities are situated in the Atlantic Forest biome (Bomfim *et al.* 2002a; b).

The occurrence of *A. planirostris* and *T. cirrhosus* in Sergipe was expected based on the distribution proposed by Hollis (2005) and Cramer *et al.* (2001), and the absence of previous records is probably related to the scarcity of bat inventories in this state (Mikalauskas 2005). Our records extend the distribution of *A. planirostris* and *T. cirrhosus*

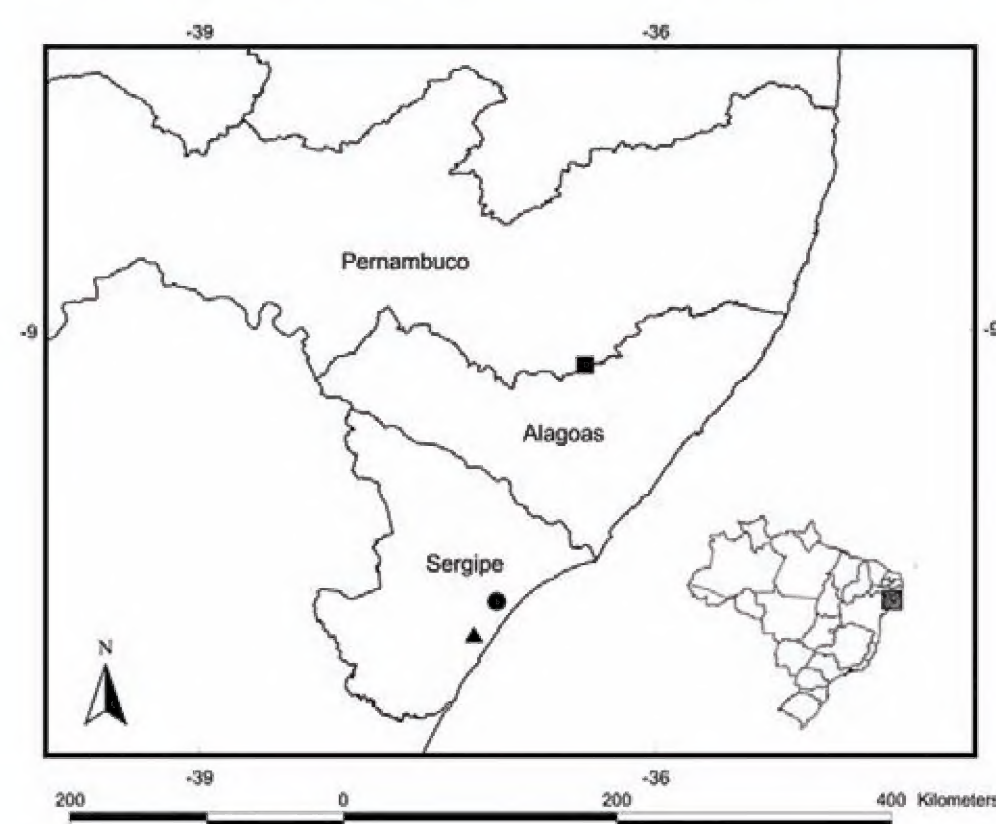


FIGURE 1. New locality records for *Artibeus planirostris* (circle; municipality of Santo Amaro das Brotas) and *Trachops cirrhosus* (triangle; municipality of São Cristóvão) in the state of Sergipe, northeastern Brazil, and previous nearest locality record for both species (square) in Quebrangulo, state of Alagoas.

in, respectively, 185 and 213 km southwest, from the municipality of Quebrangulo, located in the state of Alagoas (Sousa *et al.* 2004) (Figure 1). A total of 19 bat species are now known for the state of Sergipe (Alencar *et al.* 1994; Mikalauskas 2005).

ACKNOWLEDGMENTS: We thank Jadson Luis da Silva Brito and Newton Gurgel Filho for technical support. This study was supported by the CNPq (Brazilian Research Council).

LITERATURE CITED

Alencar, A.O., G.A.P. Silva, M.M. Arruda, A.J. Soares, and D.G. Guerra. 1994. Aspectos biológicos e ecológicos de *Desmodus rotundus* (Chiroptera) no nordeste do Brasil. *Pesquisa Veterinária Brasileira* 14(4): 95-103.

Bomfim, L.F.C., I.V.G. Costa, and S.M.P. Benvenuti. 2002a. *Projeto Cadastro da Infra-estrutura Hídrica do Nordeste: Estado de Sergipe. Diagnóstico do Município de Santo Amaro das Brotas*. Aracajú: Ministério de Minas e Energia. 23p.

Bomfim, L.F.C., I.V.G. Costa, and S.M.P. Benvenuti. 2002b. *Projeto Cadastro da Infra-estrutura Hídrica do Nordeste: Estado de Sergipe. Diagnóstico do Município de São Cristovão*. Aracajú: Ministério de Minas e Energia. 29p.

Bredt, A. and W. Uieda. 1996. Bats from urban and rural environments of the Distrito Federal, mid-western Brazil. *Chiroptera Neotropical* 2(2): 54-57.

Cramer, M.J., M.R. Willig, and C. Jones. 2001. *Trachops cirrhosus*. *Mammalian Species* 656: 1-6.

Hollis, L. 2005. *Artibeus planirostris*. *Mammalian Species* 775: 1-6.

Martins, A.C.M., E. Bernard, and R. Gregorin. 2006. Invetários biológicos rápidos de morcegos (Mammalia, Chiroptera) em três unidades de

conservação do Amapá, Brasil. *Revista Brasileira de Zoologia* 23(4): 1175-1184.

Mikalauskas, J.S. 2005. Morcegos; p. 93-103 *In* C.M. Carvalho and J.C. Vilar (ed.). *Parque Nacional Serra de Itabaiana - Levantamento da Biota*. Aracajú: IBAMA.

Miretzki, M. 2003. Morcegos do Estado do Paraná, Brasil (Mammalia, Chiroptera): Riqueza de espécies, distribuição e síntese do conhecimento atual. *Papéis Avulsos de Zoologia* 43(6): 101-138.

Moreira, D.O., B.R. Coutinho, and S.L. Mendes. 2008. O status do conhecimento sobre a fauna de mamíferos do Espírito Santo baseado em registros de museus e literatura científica. *Biota Neotropica* 8(2): 163-173.

Nogueira, M. R., A.L. Peracchi, and R. Moratelli. 2007. Subfamília Phyllostominae; p. 61-97 *In* N.R. Reis, A.L. Peracchi, W.A. Pedro, and I.P. Lima (ed.). *Morcegos do Brasil*. Londrina: Editora da Universidade Estadual de Londrina.

Sousa, M.A.N., A. Langguth, and E.A. Gimenez. 2004. Mamíferos dos Brejos de Altitude Paraíba e Pernambuco; p. 229-254. *In* K. Porto, J.J.P. Cabral, and M. Tabarelli (ed.). *Brejos de Altitude de Pernambuco e Paraíba: História Natural, Ecologia e Conservação*. Série Biodiversidade. Brasília: Ministério do Meio Ambiente.

Vizotto, L.D. and V.A. Taddei. 1973. *Chave para determinação de quirópteros brasileiros*. São José do Rio Preto: Universidade Estadual de Paulista. 72 p.

Zórtea, M. 2007. Subfamília Stenodermatinae; p.107-128 *In* N.R. Reis, A.L. Peracchi, W.A. Pedro, and I.P. Lima (ed.). *Morcegos do Brasil*. Londrina: Editora da Universidade Estadual de Londrina.

RECEIVED: October 2009
REVISED: November 2009
ACCEPTED: December 2009
PUBLISHED ONLINE: February 2010
EDITORIAL RESPONSIBILITY: Marcelo Rodrigues Nogueira